

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 35177WOP00	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).	
International Application No. <b>PCT/AU2003/000473</b>	International Filing Date (day/month/year) 22 April 2003	Priority Date (day/month/year) 22 April 2002
International Patent Classification (IPC) or national classification and IPC Int. Cl. <sup>7</sup> E21D 9/10, E21C 25/16, 27/12, 27/24		
Applicant ODYSSEY TECHNOLOGY PTY LTD et al		

This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheet(s).

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 23 October 2003	Date of completion of the report 27 July 2004
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  <b>LEOPOLD FILIPOVIC</b> Telephone No. (02) 6283 2105

**I. Basis of the report****1. With regard to the elements of the international application:\***

- ☒ the international application as originally filed.
- ☐ the description,    pages    , as originally filed,  
                                 pages    , filed with the demand,  
                                 pages    , received on    with the letter of
- ☐ the claims,    pages    , as originally filed,  
                                 pages    , as amended (together with any statement) under Article 19,  
                                 pages    , filed with the demand,  
                                 pages    , received on    with the letter of
- ☐ the drawings,    pages    , as originally filed,  
                                 pages    , filed with the demand,  
                                 pages    , received on    with the letter of
- ☐ the sequence listing part of the description:  
                                 pages    , as originally filed  
                                 pages    , filed with the demand  
                                 pages    , received on    with the letter of

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

**4. ☐ The amendments have resulted in the cancellation of:**

- ☐ the description,    pages
- ☐ the claims,    Nos.
- ☐ the drawings,    sheets/fig.

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 4, 8-16	YES
	Claims 1-3 and 5-7	NO
Inventive step (IS)	Claims	YES
	Claims 1-16	NO
Industrial applicability (IA)	Claims 1-16	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

The following citations have been considered for the purpose of this report:

- a) US 5125719,
- b) WO 00/46486,
- c) EP 727562 and
- d) US 5462364.

**Claims 1-3 and 5-7**

Each of citations (a) and (b) discloses all the features of the invention defined by claim 1. For example see:

(1) figures 6, 7 and 10 of US 5125719 and its description at column 4, line 46 - column 8, line 8 (the radial bearing rollers 50 and 52 and the pressurised cavity 80 provided to bear axial thrust loading and considered to be the first axial bearing) and

(2) page 9, line 30 - page 12, line 7 and figure 7 of WO 00/46486 (please note that a water lubricated bearing described by this citation is also considered to be a hydrostatic bearing, this construction being supported by EP 727562 - see the abstract). The features added by claims 2, 3 and 5-7 are also known from WO 00/46486.

Therefore the subject matter of claims 1-3 and 5-7 is not new and does not meet the requirements of Article 33(2) PCT with regard to the requirement for novelty and the requirements of Article 33(3) PCT with regard to the requirement for inventive step.

**Claims 4 and 8-16**

Dependent claims 4 and 8-16 do not appear to contain any additional features which in combination with the features of the claim(s) to which they refer, involve an inventive step, since the features defined therein are known from the documents cited (for example see US 5462364 which refers to the feature of selecting the hydrostatic fluid bearing's viscosity and pressure level correlated with the rotary speed) or lie within the technical capabilities of the person skilled in the art.

Therefore the subject matter of these claims is considered to be obvious and does not meet the requirements of Article 33(3) PCT with regard to the requirement for inventive step.